

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



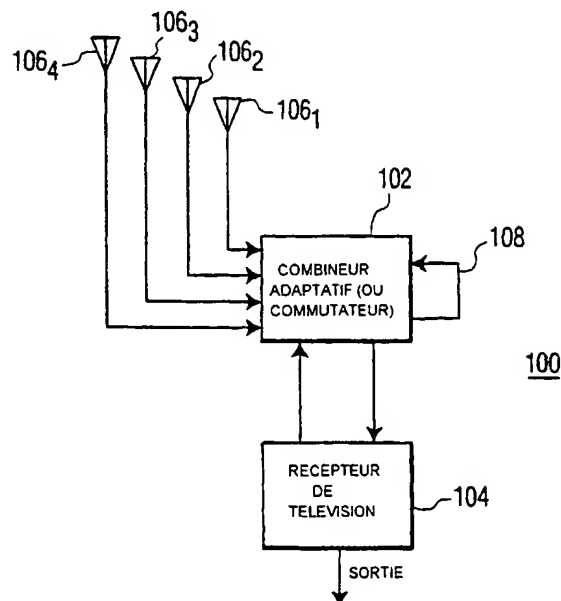
(43) International Publication Date  
15 March 2001 (15.03.2001)

PCT

(10) International Publication Number  
**WO 01/19075 A2**

- (51) International Patent Classification<sup>7</sup>: H04N 5/21, H04B 7/08 (74) Agents: TRIPOLI, Joseph, S. et al.; Thomson multimedia Licencing Inc., P.O. Box 5312, Princeton, NJ 08540 (US).
- (21) International Application Number: PCT/US00/24708 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (22) International Filing Date:  
8 September 2000 (08.09.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/152,859 8 September 1999 (08.09.1999) US
- (71) Applicant (*for all designated States except US*): THOMSON LICENSING S.A. [FR/FR]; 46, quai Alphonse Le Gallo, F-92648 Boulogne Cedex (FR).
- (72) Inventors; and  
(75) Inventors/Applicants (*for US only*): CRANOR, Thomas, Howard, Bruce [US/US]; 9503 Nora Lane, Indianapolis, IN 46240 (US). HALL, Edward, Allen [US/US]; 868 Desert Wind Court, Carmel, IN 46032 (US).
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— Without international search report and to be republished upon receipt of that report.
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR REDUCING MULTIPATH DISTORTION IN A TELEVISION SIGNAL



WO 01/19075 A2

(57) Abstract: A method and apparatus for reducing multipath distortion in a television signal includes a plurality of antenna elements for receiving spatially unique replicas of a desired television signal. The plurality of spatially unique replicas of the television signal are coupled to an adaptive combiner for generating a spatially combined signal to be input to a television receiver.